NUCLEAR DIVISION NEWS a newspaper for employees of the nuclear division • union carbide corporation

Vol. 10/No. 17 September 6, 1979



Take the bus—leave the driving to B and H!

by Gail Carter

Each morning at 7:30, a large Trailways bus downshifts, slowly rounds the corner at ORGDP's main entrance, and pulls up beside Portal 2. While other employees continue to enter the parking lot in small cars and gas guzzlers, 15 or 20 well-rested passengers emerge from the bus and head toward the portal. The bus noses back into the line of cars and rumbles down to its second and final stop, Portal 4.

No, ORGDP has not been added as

a new stop on the Trailways' bus schedule...this is B & H Transit, owned and operated by two ORGDP employees, Steve Buffalo (Finance, Materials, and Services Division) and Charlie Hinton (Maintenance Division).

In February 1976, Buffalo and Hinton began a vanpool for employees in the Knoxville/Cedar Bluff area. Although the van was filled with riders, the two drivers still had a long waiting list of people needing transportation to work. So, Buffalo and Hinton began looking for a gas

saving method to meet the people's needs. On April 16, 1979, they put B & H Transit into operation.

Buffalo and Hinton purchased the diesel bus from the Knoxville Volunteer Easter Seal Society. Buffalo said that during the ride to the plant, most of the 41 passengers just sleep. It's no wonder - the bus is air conditioned, has music (radio), and reclining cushioned seats. The drivers estimate that on a weekly basis the bus covers approximately 330 miles and uses only 45 gallons of gas - about one gallon per rider.

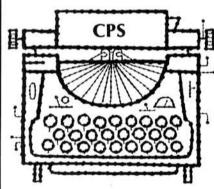
Eugene E. Clark, one of the riders,

gives his opinion of the bus: "I think it's just great! It gives me a chance to sleep in the morning and again in the afternoon. And since I hate driving so far in to work, it saves wear and tear on me as well as my car.'

Buffalo and Hinton haven't had any major mechanical problems with the bus; however, someone did steal a 150-pound battery while it was parked on Middlebrook Pike. Since then the two owners have added safety locks to important compartments on the bus.

(More photos on page 8)

In this issue. .



A total of 11 Nuclear Division secretaries have been awarded their Certified Professional Secretaries (CPS) standings, making them among the elite of their profession. The Nuclear Division boasts more CPS's than any other major organization in the U.S. Profiles of the new CPS's are found on pages 4 and 5.

Other features:

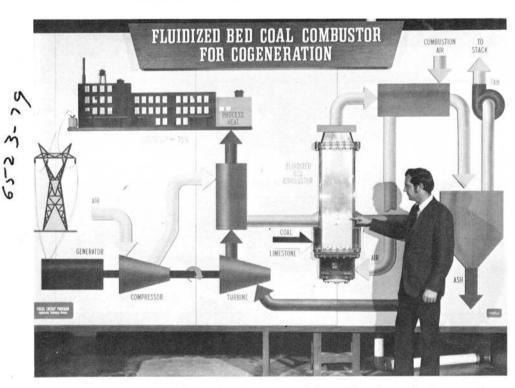
- Energy AdvisorPage 2
- PromotionsPage 3
- •Dr. Lincoln.....Page 4
- •Question BoxPage 5

Samples from Three Mile Island

The first samples of water and metal from the reactor containment building at the Three Mile Island Nuclear Facility in Pennsylvania arrived at ORNL last week. These samples will undergo a series of chemical and radiological analyses in the Analytical Chemistry Division to determine the type of material present and the processes that may be used to clean up the water. The process development work will be done by the Chemical Technology Division. Here, James L. Botts, Analytical Chemistry Division, illustrates the procedure that will be used to divide the three ounces of water into smaller containers for analysis. The actual process will be performed behind a wall of steel bricks inside a ventilation hood. The three-inch-diameter by one-inchthick slug of metal is shown below







PLAN FOR TEST PLANT—Robert Holcomb, manager of the Coal Combustor for Cogeneration Program at ORNL, indicates the role of the fluidized bed coal combustor in a scheme for generating both electricity and industrial process heat. A team of three industrial firms has been selected to construct a test plant at ORNL to study the use of a fluidized bed combustion/gas turbine system for cogeneration.

Coal test plant planned

ORNL has selected a team of three industrial firms for a development program that will include construction of a test plant at ORNL to study the use of a fluidized bed coal combustion/gas turbine system for the cogeneration of electricity and industrial process heat.

A subcontract of approximately \$1.8 million is being negotiated with Westinghouse Electric Corporation, Concordville, Pa.; Babcock and Wilcox Company, New Orleans, La.; and Stone and Webster, Inc., New York, N.Y.

Located at Y-12

The industrial team will be working with ORNL in carrying out a variety of tasks under the Coal Combustor for Cogeneration (CCC) Program, sponsored by DOE's fossil energy research office. The CCC program is part of a national effort to develop clean-burning coal systems for industry and electric utilities.

The tasks will include design and construction of the test plant, which will operate at an electric power output of 200 kW; completion of the conceptual design for a larger (20 to 25 MW) plant; preparation of a site-specific demonstration plant design; and preparation of a plan for the commercialization of the CCC system.

Construction of the test plant will begin during FY 1980. The plant will be located near Building 9201-3 at the Y-12 Plant site.

Sulfur, limestone react

Fluidized bed combustion allows the burning of high-sulfur coal with minimal air pollution, by removing approximately 90 percent of the sulfur dioxide emitted when the coal is burned. The technique involves blowing a stream of hot air upward through a bed of small particles of coal and limestone, "fluidizing" the bed and causing the coal to burn. Most of the sulfur dioxide released from the burning coal reacts chemically with the limestone, which prevents it from escaping to the environment.

In the cogeneration concept, air that is heated in the heat exchanger inside the fluidized bed will be fed to a turbine generator for the production of electricity. The exhaust heat from the turbine is to be used for industrial process heat.

Manager for the CCC program at ORNL is Robert S. Holcomb of the Engineering Technology Division's fossil energy technology section. This section, headed by John E. Jones Jr., was formed recently to consolidate those Division activities that are part of ORNL's Fossil Energy Program.

NSA sets seminar

The annual seminar for career secretaries and office personnel, sponsored by the Oak Ridge Chapter of National Secretaries Association, will be held at the Holiday Inn in Oak Ridge on September 15. The \$15 registration fee will include a buffet breakfast and a light snack at noon.

Sandy Smith, clinical psychologist, training consultant, and director of Area Counseling Services in Oak Ridge will be the guest speaker. "Developing Personal Potential" will be the topic of his address.

Smith conducts training seminars and workshops for people in all professions. He is a frequent speaker at professional, civic, and religious organization meetings. He writes and produces "Comments on Creative Living," a syndicated radio show that deals with coping with events in everyday life.

Registration forms may be obtained from any division secretary or NSA member.

Patent granted. . .

To Gary L. Haag and David W. Holladay of ORNL for "Method of Immobilizing Carbon Dioxide from Gas Streams."

Conservation in workplaces: A look at lighting

By Charles E. Murphy, Plant and Equipment Division

Depending on the circumstances, lighting can be either a very large or a relatively small fraction of the electrical-energy use of a building or building complex, such as one of the installations at which we work.

At ORNL, for example, where research machines such as reactors and accelerators are the major electricity consumers, lighting accounts for only about 15 percent of the gross electrical use.

In some buildings, however, the lighting load may be as high as 80 percent of the winter electrical load and approximately 50 percent of the summer load. The higher figures are more likely to hold if the building is heated by steam and has central air conditioning.

Old buildings

Practically all of the buildings with which I am most familiar at ORNL were designed when energy was cheap. Since there was a question as to the location of the "work station," the designs called for uniform lighting levels of approximately 100 foot candles throughout the building.

In many cases, switching was designed to control lights in large banks. This was done because the price of electrical energy was so low that the savings due to turning off lights did not pay for the shortening of the tube life due to frequent switching.

This is no longer the case. Now, not only is it a good conservation habit but it is also good economics to turn off lights whenever an area is unoccupied.

DOE light levels

The Department of Energy has published guidelines which require that light levels should be reduced to 50 foot candles at the work station, 30 foot candles in the work area, and 10 foot candles in hallways and corridors. The National Bureau of Standards has modified these guidelines into what are called 'design level recommendations' which include a variable called the Visual Difficulty Factor of certain tasks. This factor includes such things as the visual difficulty rating of a specific task, the number of hours that task is performed, and the age of the persons involved.

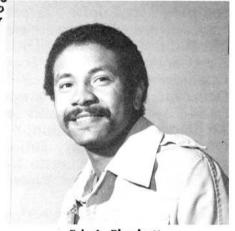
The following tables show the visual difficulty factors calculated for various building areas and types of office work and the recommended light levels (in foot candles) for each.

| Area O | ther Illumination Levels Design Level (FC) | Range FC | |
|----------------------------|---|-------------|--|
| Auditoriums | 30 | 20-40 | |
| Cafeteria | 30 | 20-40 | |
| Conference Rooms | 30 | 25-35 | |
| Corridors & Lobbies | 15 | 10-18 | |
| Kitchen (Average) | 50 . | 30-70 | |
| Mechanical Rooms | 10 | 5-15 | |
| Storage Areas (General) | 10 | 5-15 | |
| Storage Areas (Fine detail | required) 30 | 25-35 | |
| Toilets | 20 | 15-30 | |

| Task or Area | VDF | Design Level FC | Range FC |
|---|-------|-----------------------|-------------|
| Service or Public Area | _ | 15 | 12-18 |
| Circulation Areas (Not at work station) | _ | 30 | 24-36 |
| Normal Office Work, Reading, Writing, etc. | 1-39 | 50 | 40-60 |
| Office work, Visually difficult, 5 hrs bookkeeping (8) 3 hrs shorthand (4) 5 x 8 + 3 x 4 = 52 | 40-59 | 75 | 60-90 |
| Office Work, Visually difficult. 8 hrs bookkeeping (8) 8 x 8 = 64 | 60-up | 100 | 80-120 |

(Please see next page)

action coordinator at Y-12



Eric L. Plunkett



George N. Cobham

Patent granted. . .

To lames M. Leitnaker, Everett E. Bloom, Arthur F. Rowcliffe and James O. Stiegler, all of ORNL, for "Austenitic Stainless Steel Alloys Having Improved Resistance to Fast Neutron-Induced Swelling.

Next issue. . .

The next issue will be dated September 20. The deadline is September 12.

Eric L. Plunkett is replacing George N. Cobham as Y-12's affirmative action coordinator. Cobham has accepted the assignment of Fire and Guard Department supervisor.

Plunkett, with the Security Department, will report to H. G. P. Snyder, Employee Relations Division superintendent. A native of Memphis, Plunkett joined Union Carbide last year after receiving an MS in administration and planning at the University of Tennessee. He has a background of work experience in student counselling and human resources planning.

Plunkett lives at 1116 Ferd Hickey Road, Knoxville

Cobham and Plunkett will collaborate in the completion of Y-12 Affirmative Action Plan for 1980, with a gradual transition of responsibilities anticipated shortly.

Cobham joined Union Carbide in 1970 as a project engineer in Y-12's Product Engineering and Scheduling Division. A native of Savannah, Ga., he has a BS degree from Savannah State College and recently participated in an engineering science course at UT.

He is a member of the Oak Ridge Personnel Advisory Board, has served on the Oak Ridge Financial Assistance Committee, the Mayor's Committee on Bikeways and the Scarboro Community Center Restoration Committee. He is a past vice chairman of the Oak Ridge Community Relations Council and served on Oak Ridge's 1974 Precinct Reapportionment Committee.

Cobham and his wife, Evelyn, who works in the Engineering Division at ORNL, live at 103 Davidson Lane, Oak Ridge. They have two sons, Kenneth and Shawn.

Conservation in workplaces

(Continued from page 2)

In our own facilities, efforts have been made to reduce lighting levels in most areas to meet these general criteria. Often, however, it is difficult to maintain these levels because of the many moves that some personnel are required to make, thereby shifting work stations, and the inadvertent replacing of tubes in delamped areas.

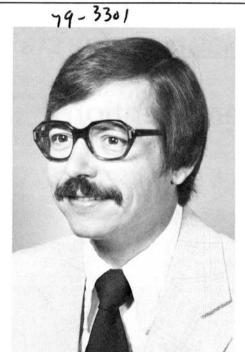
Obviously, the aim is not to deprive any employee of the light necessary to accomplish his or her work. However, past experience when the cost of electrical energy was much lower conditioned all of us to expect more light at our work station than we really need. In most instances this has proved to be more a case of habit than need.

In general, if a concerted effort is made to use only the amount of light needed by each employee and to develop the habit of turning lights off when areas are unoccupied, an appreciable reduction in plant-wide electricity costs can be achieved.

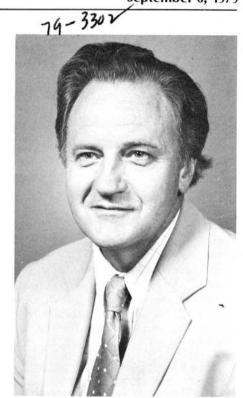
Those who think lighting levels may be excessive in their own work areas are encouraged to check with the field engineer at their locations.

Facility-wide delamping efforts begun in the aftermath of the 1973 oil embargo have resulted in electrical energy savings throughout the Nuclear Division of some 30.2 million kwh of electricity on an annual basis. This represents a savings of \$775,000 in annual operating costs from this one area of conservation alone.

Editor's Note: Recently we began a series of energy conservation features which will be alternated with questions from readers to the "Energy Advisor" on conservation-related topics. The articles will be written by staff members about their own experiences or research, with ORNL's Merl Baker (alias the Energy Advisor) coordinating the series. Employees with questions or ideas for articles should contact their Nuclear **Division News** representative listed on the masthead.



Thomas H. Monk



Leslie R. Powers

Separation Systems appointments

Several appointments have been made in the Separation Systems Division at ORGDP.

Thomas H. Monk has been named manager of administration. A native of Shawmut, Ala., he has a BS in chemical engineering from Georgia Tech and an MS from the University of Tennessee.

Monk joined Union Carbide in 1966, and since 1968, has been with Special Projects. He lives at 2300 Bishops Bridge Road, Knoxville, and has a daughter, Erin.

Leslie R. Powers has been made chief of planning and systems integration. A native of Patterson, N.J., he has a BS in chemical engineering from the University of Virginia. He joined Union Carbide in 1951 in the Operations Analysis Division, and his most recent assignment was as manager of technology interlations in OCPO.

Powers and his wife, Betty, live at 516 Scenic Drive, Clinton. They have three sons, David, Gary and Jeff.

manager of recycle/assembly operations. A native of Murray, Ky., he has a BS degree in chemistry and mathematics from Murray State University. He joined Union Carbide at the Paducah Plant in 1951, transferred to Y-12 in 1960, and to ORGDP in 1972 where his most recent assignment has been manager of field maintenance.

Cable and his wife, Verna, live at 7404 Bennington Drive, Knoxville. They have a daughter, Tricia Johnson, and three sons, Robert Jr., Steve and

Betty A. Kaminski has been named supervisor of records and word processing. A native of Detroit, she has a BS degree from Wayne State University. She joined Union Carbide in 1977 in the Operation Analysis and Planning Division.

Kaminski lives at 205 East Sheridan Place, Oak Ridge.

Rose C. Wood has been named office manager for the administrative services group. Administrative services is a new group that includes all secretarial services, word processing, procurement coordination, records management and teleconference facility operations for the division.



Robert E. Cable has been made 14-3305 Robert E. Cable 3364-79



Kaminski

Wood

Wood has been a Nuclear Division employee for 13 years, working first with the Nondestructive Testing Department at the Y-12 Plant. At ORNL she was employed in the Industrial Hygiene Department and later served as secretary to the director of the Fusion Energy Division. Her most recent position has been as an administrative aide in Advanced Energy Systems in ORNL's Central Management Offices.

A native of Morgan County, Wood lives in the Coalfield Community with her son, Vince.



Medicine Chest. . .

Water retention

by T. A. Lincoln, M.D.

(Editor's Note: Dr. Lincoln alternates his regular column with "The Medicine Chest," where he answers questions from employees concerning health in general. Questions are handled in strict confidence, as they are handled in our Question Box. Just address your question to "Medicine Chest," NUCLEAR DIVISION NEWS, Building 9704-2, Stop 21, Y-12, or call the news editor in your plant, and give him or her your question on the telephone.)

QUESTION: "Could you touch on some of these points: fluid retention due to too much sodium after sitting too long; swollen legs and feet at the end of the day but some of it gone early in the morning; occasional swollen hands and feet in the morning which seems to disappear after a short time of being up and walking about; and the affect of fluid retention on one's heart?"

ANSWER: The physiology pathology and treatment of fluid balance disturbances are exceedingly complex subjects with literally thousands of technical papers and books having been published. Let's

keep it simple.

The total volume of water in the body normally varies somewhere between 50 percent and 70 percent of the body weight. Although it may surprise many readers, the percentage of body weight is considerably higher in lean than in obese people.

Body Water

About 55 percent of the body water is located within the cells (intracellular) and 35 percent outside the cells (extracellular). Seven and one half percent of the extracellular water is located in the blood as plasma and 27.5 percent is located between cells. Bone water accounts for 7.5 percent. Two and one half percent is passing either in or out of these compartments except for bone water which is relatively stable. Swelling or edema represents a local accumulation, e.g., feet and lower legs, or a generalized accumulation, e.g., rapid weight gain after eating a lot of salt, of extracellular fluid.

Normal healthy adults maintain water balance guite easily. When the temperature is comfortable, they will drink from one to two and one half liters of liquid per day. They obviously need much more if they exercise and sweat a great deal. They will get from one to two liters in their solid and semi-solid foods and a little from oxidation during metabolism. They, therefore, add about 2½ to 4½ liters to their body stores of 30 to 50 liters of

They lose water in urine, feces, sweat and from the respiratory tract due to evaporation. Normally, they keep this balance quite easily and body weight varies less than 1 percent from day to day if measured at the same time. Women vary much more than men because of the cyclical changes in sex hormone levels related to the menstrual cycle.

Sodium salts in the body determine the volume and composition of the extracellular fluid. Sodium enters the body in many foods. The intake varies from 2 grams to as much as 10 grams per day. A heavy eater may take in a great deal of sodium even though he does not add any salt (sodium chloride) to his food.

After a salt binge, such as an evening of salted popcorn, peanuts, potato chips and beer, the healthy kidney excretes most of the excess. For example, the glomerulus (the filter part) of the kidney may filter out over 550 grams of sodium every day or roughly eight times the total body sodium content and 250 times the daily intake! About 99.5 percent of the sodium is reabsorbed in the convoluted tubules. When overloaded, the healthy kidney can reabsorb less to get rid of the excess. Several hormones such as aldosterone from the adrenal glands and the antidiuretic hormone from the pituitary are the crucial regulators. The mechanisms of their control is a subject of considerable research interest.

When, because of hormone effects, injuries or disease states, etc., the body retains excess water, it may appear as swelling or edema. When one lies down, it is evenly distributed. When one stands up, it tends to gradually fall to the most dependent portions of the body, such as the feet, legs and, to a lesser extent, the hands. When a person exercises, the pumping action of the muscles helps redistribute the water. Whenever the return of venous blood is partially obstructed due, for example, to prolonged sitting or constrictive clothing, localized swelling may occur.

> Fluid retention and the healthy heart

Modest fluid retention is of no concern to the healthy heart except that it makes more work for it. When the heart is diseased, this increased load can eventually cause heart failure. People who are genetically predisposed to high blood pressure will develop it much sooner and more severely if their sodium intake is too high.

Diuretic medicines cause the kidney to release sodium and subsequently, water. They are useful medications especially for people who have high blood pressure or heart disease. They should not be used for minor reasons.



Jeanne D. Moody, a native of Wise County, Va., has attended UT and has been with Union Carbide 20 years. She lives at Route 1, Kingston, with her son, Tony Joe Mitchell.



Peggy L. Ray worked as a church secretary and in school administration before joining Union Carbide three years ago. She is a native of Russell County, Va. She and her husband, Raymond, live at 100 Coe Road, Oak Ridge. They have four children, Karen, Larry, John and Scott. 79-3473



Charlotte E. Johnson has been with Union Carbide since 1976 and has worked 13 years in secretarial work in the advertising and publishing fields. She lives in West Knoxville with her daughter, Laurie; and sons, Bill, Guy

11 CPS's added

Another 11 Nuclear Division secretaries Secretaries (CPS), by the National Se company's total up to 129, probably the

Of the new CPS's, ten are employed in t (the Paducah secretary will be featured in are: Nancy S. Currence, Engineering Ph Operations Accounting, Y-12; Wanda Department, ORGDP; Charlotte E. Johnson Edith C. Jones, Health and Safety Resear Technical Services Division, Y-12; Cathy \ ORNL; Peggy L. Ray, Fusion Energy administrative secretary to Kenneth W. ORGDP; and Sherry M. Wilfert, Nuclear

To be certified by the NSA, an applicar undergo a rigid examination covering ac psychology, secretarial procedures, efficiency business law.



Sandra K. Whitaker is a native of Knoxville. She has been at ORGDP 16 years and in her present position seven. She and her husband, Marvin, live at Route 1, Hickory Creek Road, Lenoir City, with their daughter,



Wanda B. Howard is a graduate of Knoxville Business College and has also attended UT. A native of Roane County, she has been in ORNL's Engineering and worked in the Purchasing Department of Oak Ridge Associated Universities. Her husband, Samuel, is employed in the ORGDP Maintenance Division. They live at Route 3, Harriman. They have a daughter, Susan LaGuardia.

to growing roll

have been named Certified Professional cretaries Association. This brings the highest in the nation!

he Oak Ridge plants, and one at Paducah a later edition). The new Oak Ridge CPS's sysics Division, ORNL; Linda L. Hodge,

B. Howard, Materials Management on, Separation Systems Division, ORGDP; rch Division, ORNL; Jeanne D. Moody, /. Oldham, Computer Sciences Division, Division, ORNL; Sandra K. Whitaker, Sommerfeld, deputy plant manager at Materials Control and Accountability, Y-

it must be in a secretarial position, then counting, economics, business-oriented tiency and setting work priorities, and



Sherry M. Wilfert, a native of Oak Ridge, has been in Y-12 five years. She has attended Eureka Vocational School and Roane State Community College. Her husband, David, is with the Department of Energy. They live



Nancy S. Currence, a native of Grainger County, joined Union Carbide in 1977 after working in the College of Nursing at the University of Tennessee, where she has attended classes.

Currence and her husband, Edward, live at 11108 Hughlan Drive, Concord. They have four children, Douglas, Marilyn, Linda and Sherri.



Linda L. Hodge joined Union Carbide five years ago after working with W. W. Chance Associates, Inc. She was born in Knoxville and has attended the Knoxville State Area Vocational-Technical School as well as UT. Her husband, Jack, works at ORGDP. They live at Route 20, Glastonbury Road, Knoxville. They have two daughters, Patti Edlin and Krista.



Edith C. Jones, a native of Gadsden, Ala., is a graduate of Knoxville Business College. She was with U. S. Nuclear, Inc. before joining Union Carbide. Jones and her husband, Jack, who is in Y-12's Metal Preparation Division, live at 100 Oklahoma Avenue, Oak Ridge. They have two children, Beth and Ben.



Cathy V. Oldham was born in Henderson, Tenn., and holds an AA degree from Freed-Hardeman College and a BS from Harding College. Her husband, Tim, is a chemist at ORGDP. They live at 331 East Drive, Oak Ridge. She taught school at Harding Academy, Searcy, Ark., and worked with the H & M Construction Company before joining Union Carbide.

Parzyck to health physics post

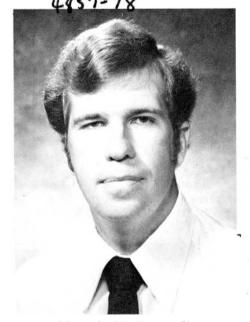
Dennis C. Parzyck has been appointed head of the health studies section, Health and Safety Research Division at ORNL.

The health studies section examines the health effects of energy-related activities. It is also involved in the development of radio pharmaceuticals for use in diagnosis and treatment of various diseases.

Parzyck will direct the activities of four research groups. In addition, he will manage the office of integrated assessments and policy analysis in the Health and Safety Research Division and will coordinate activities at the Laboratory that are funded by DOE's Office of Technology Impacts.

He joined the ORNL Environmental Sciences Division as a member of the analysis and assessments section in 1974, and later served as manager of the Regional Resources Analysis and Planning Program. In 1977, he became leader of the methodology development and evaluations group of the Health and Safety Research Division and had served as acting head of the health studies section since 1978.

A native of Minneapolis, Minn., Parzyck received his BA in physics from St. Mary's College, Winona, Minn., and his MS and PhD degrees in



Dennis C. Parzyck

bionucleonics from Purdue University. Prior to joining Union Carbide, he was a nuclear physicist in the U.S. Navy and worked with the Defense Atomic Support Agency, Albuquerque, N.M.

Parzyck holds membership in the Health Physics Society, Sigma Xi and the American Association for the Advancement of Science.

He and his wife, Penny, reside at 111 Windgate Road, Oak Ridge.

question box. . .

If you have questions on company policy, write the Editor, **Nuclear Division News** (or telephone your question in, either to the editor, or to your plant contact). Space limitations may require some editing, but pertinent subject matter will not be omitted. Your name will not be used, and you will be given a personal answer if you so desire.

QUESTION: By what authority can the company force an employee to work over time?

ANSWER: The Company cannot force an employee to work, much less work over time. However, upon employment you were informed that the normal workweek is 40 hours and that the working hours and shift schedules are subject to change and may vary for different employees, depending upon work requirements. There are times when the organization requires work in excess of 40 hours per week or 8 hours per day. As a member of the organization, it is necessary that you fulfill your job requirements along with other members of your organization unless extenuating circumstances acceptable to your supervisor exist.

Medical insurance woes

QUESTION: Why can't Union Carbide employees get better service from Blue Cross/Blue Shield, especially since it is such a large account? Is the Blue Cross/Blue Shield contract awarded on a competitive basis? Could not another carrier be found to give better service, make fewer errors in settling claims, and give overall better insurance than we are getting?

ANSWER: We have continued to do business with Blue Cross/Blue Shield in Oak Ridge for many years since their service has, over the long pull, been satisfactory and their cost for administering the plan has been competitive with others in the business. We agree that the service has deteriorated in the past six months or so and have indicated to Blue Cross/Blue Shield of Tennessee that it must be improved; they assure us that they are making every effort to improve the service, and they are aware that failure to improve would result in our inviting other insurance companies to bid on the coverage.

Tax withholding

QUESTION: Under present policy, an employee who has an insufficient amount withheld from his pay to meet yearly tax liability is required to declare extra minus deductions. Most large companies permit employees to specify an even dollar amount to be deducted to satisfy that need. The extra exemption method is both cumbersome and inaccurate for the individual—and must be extremely bothersome and time-consuming for the accounting departments. Why can't we have the option of a fixed dollar amount deduction?

ANSWER: The option you suggest could be provided, but to do so would involve additional computer programming, forms and expense. The present method (declaring extra minus deductions) provides employees a reasonable amount of flexibility in authorizing income tax deductions. It has been in use for many years and has apparently met the requirements of most employees.

recreationotes. . .

Golf tournaments. .

J. Connaster's 68 was low at Whittle Springs as ORNL duffers wound down the season. He was followed by H. Tuck, 70. Handicap winners were J. Warren, 74; and C. Case, 77.

Division II went to L. Gipson, 76; and B. George, 78. Handicap lows were registered by H. Wiggins, 76; and K. Lawson, 79.

Division III went to D. Underwood, 84; and R. Ross, 85; while handicap lows were carded by W. Cooper, 89; and W. Fair, 93.

Winners may pick up their awards from Debbie Walker, Room J-108, Building 4500N.

South Hills golf. . .

The South Hills Thursday League golfers completed play recently, naming the following winners: Don Harrell, Chuck Schaich and B. J. Hughey. Earl Smith, Ed Sise, George Cantrell, Bill Sise and Joe Pryor were the runners-up.

South Hills tourney. . .

The South Hills League recently held an 18-hole tournament with 50 duffers hitting the greens. Division I winners were Bob Livesey, R. E. Lampton, Jim George, Frank Clayton and Harold Alvey. Division II honors went to Joe Pryor, Billy Carter, Brenda Disney, Curt Ridings, Fred Manning and Roy Morrow.



Jim Cook, a process operator in Y-12's Beta Four, took his first hole-in-one August 25 at Lakeside Golf Course. Using a number 6 iron, he aced hole number four, a par-three obstacle. Fellow Y-12er Roscoe Hicks was playing in a twosome with Cook.

Hi Power Rifle. . .

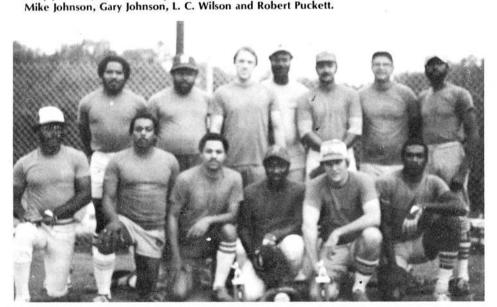
Y-12's Roger Wiegand won the last match of the High Power Rifle League with a 435 out of 500. Paul Glover, ORNL, was a close second with a 433 and Bud Baker, also of ORNL, placed third with a 366.

Bowlers needed. . .

The Y-12 C League, bowling at Tri-County Lanes at 5:45 p.m. Monday needs a full team of five men. Anyone interested contact Dick Huber, extension 4-3662.



THE SHIFTERS—The Shifters took the Snakes in the Atomic Tournament, 7 to 5, to take the season championship title. They are, in the front row from left, Robert Owens, Steve Braden, Larry Johnson, Wendell Cooper and Sam Babb. In the back row are Dave Fritts, Ron Jeffers,



THE BIG SNAKES—The Snakes won the Atomic League with a perfect record, but lost the tournament big prize. They are, kneeling from left, Lonnie Hawkins, Vaughn Thomas, Horace Moorman, Charles Moulgun, Earl Nall and Gene Ferguson. In the back row are Richard Tate, Arnold Hawkins, Greg Winfree, Harold Conner, Calvin Angel, Bob Colton and Horace Miller.



'79 Hootenanny set at park

BAR-B-QUE K-25 HOOTENANNY is set Saturday, September 22, at the Clark Center Recreation Park. This is the 16th annual company sponsored outing held for the entire family and retired employees. All divisions in the plant, family and friends are invited. There's fun for everyone and plenty to eat and drink. The softball tournament between plant divisions begins at noon and other events begin at 1 p.m. Adult entertainment includes clogging and square dancing demonstrations, belly dancers, bands, an egg throwing contest, a comedian, a barbershop quartet, and a hole-in-one contest. Prizes will be awarded. Programs will be available at the Welcome Station.

Children's games will entertain the kids all afternoon. There will be

clowns, bean bag and ring tossing games, ball throwing, and rolling contests, prizes, bubble gum hunt, magic show and puppet show.

UT football fans - double your fun! Dinner will be served this year at 4 p.m. and the UT-Utah game does not begin until 7:30 p.m. The dinner includes either a barbeque sandwich or hot dogs and baked beans, cole slaw, potato chips, soft drinks, coffee and tea.

Ticket representatives in each division have tickets available. If problems are encountered in finding tickets call either Gary Patterson, 4-7703, or Don Blanton, 4-8990. Adult tickets are \$3 and children (under 12) tickets are \$1.50.







PADUCAH PICNIC—Fun at Noble Park was the word from the Technical Services Division at Paducah recently. Even the young enjoyed a glimpse of a custom-made hotrod. Another popular feature was the giant water slide, seen in the top photographs.

wanted. . .



ORGDP

CAR POOL MEMBERS from Cedar Lane vicinity, Fountain City, to Portal 5, straight day. C. E. Parrott, plant phone 4-8304, home phone Knoxville 688-3966.

RIDE or will join car pool from East side of Oak Ridge Turnpike to Portals 2 and 4, straight day, R. C. May, plant phone 4-9675, home phone Oak Ridge 482-9766.

RIDE from Wood Creek West subdivision (Lovell Road) to Portals 2, 3 or 4, 7:45-4:15 shift. Steve Allison, plant phone 6-2725, home phone Knoxville 690-8342.

RIDE from Crossville to any portal, straight day. K-25 car pool office, extension 4-8595.

ORNL

JOIN or FORM CAR POOL from Landmark Subdivision, Cedar Bluff, Walker Springs section, to East, North or West Portals, 8:15-4:45 shift. J. W. Sims, plant phone 4-5926, home phone Knoxville 693-8829.

JOIN or FORM CAR POOL from West Town Mall area, Knoxville, to any portal, straight days. Home phone 584-2155.



UNITED WAY REPORT—'The United Way Report,' a videotape and film report of several United Way agencies will be shown to Nuclear Division employees this year during the annual campaign. The program uses a newscast format with Ruby Miller, center, and Mike Shepherd, right, acting as anchormen. Reporters in the field also provide reports and interviews from the agencies featured. The program was written by Bob Wesley, behind the camera at left.

retirements.



Annie S. Angel Biology ORNL N79-105



Paul H. Cromeenes Engineering Paducah



Basil R. Kitts John A. Kapral Electrical



Research Services 28 years service 9 years service



Elmer L. Stokes William J. Williams Chemical Services **Quality Evaluation** 28 years service





William K. Forrester Engineering 35 years service

179-107



Thomas B. Jernigan Plant and Equipment 23 years service



36 years service

James P. Seagle Materials Forming

wanted

Inman M. McPeters

Chemical Services

28 years service.

RIDERS or members for CAR POOL from Cedar Bluff Road area. Knoxville, to any portal, straight day. Dave Hatch, plant phone 4-0231, home phone Knoxville 693-0787.

Y-12 PLANT

CAR POOL MEMBER from Cedar Bluff-Walker Springs area, Knoxville, to any portal, straight day. Ginny, home phone 693-4755, plant extension 4-3320.

New physician at Laboratory

A new doctor has joined ORNL's Health Division staff, Sam B. Shamiyeh, MD. He comes to the Nuclear Division from a private practice in general surgery in Knoxville, with a sub-specialty of pancreatic surgery.

He graduated in 1957 from the University of Tennessee, Knoxville. with a BS degree in premedicine and in 1959 received his MD from UT's College of Medicine, Memphis.

Certified by the American Board of Surgery in 1968, Dr. Shamiyeh is a member of the Knoxville Academy of Medicine, Tennessee Medical Association, American Medical Association, American College of Surgeons, Tennessee Chapter American College of surgeons, and the Knoxville Surgical Society.

He and his wife, Faye, live in Knoxville with their children, Rebecca and James.

anniversaries. . .

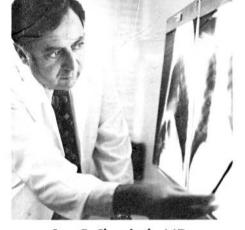
ORNL 35 YEARS

Marie G. Pickard, Biology; Forest G. Seeley, Chemical Technology; Charlie C. Wohlwend, Finance and Materials; and Neva E. Harrison, Chemistry.

25 YEARS

Robert Blumberg, William R. Busing, Kenneth E. Long, Ernest R. Clifford, Clyde R. Moree, Franz A. Posey, Betty F. McHargue, and Howard F. Bauman.

20 YEARS Larry S. Finch, Robert E. Funderlic, Rubye M. Thompson, Joe G. Tracey, and Earl W. McDaniel.



Sam B. Shamiyeh, MD

NUCLEAR DIVISION NEWS

UNION CARBIDE CORPORATION NUCLEAR DIVISION Post Office Box Y Oak Ridge, Tenn. 37830

EDITOR (Y-12) James A. Young, 574-1643

ASSOCIATE EDITOR (ORNL) Kathy Coleman, 574-9218

ORGDP Joe W. Gollehon, 574-4162

PADUCAH Darlene Mazzone, Bell 208



Member, INTERNATIONAL ASSOCIATION OF BUSINESS COMMUNICATORS



14 years service

79-3354



Busing-ORGDP style

You can read, listen to the radio, talk. . . or sleep on the way to work, if you ride the big B & H bus from West Knoxville to ORGDP. At left, the interior of the spacious bus is partially filled as it waits at a portal, and below, the relaxed employees arrive at work without the frustration of fighting traffic all the way.

Y-12 PLANT

RIDE or will form CAR POOL from East Knoxville to Central Portal, 4:30-12:30 shift. E. K. Wilson, home phone, Knoxville 523-6900.

79-3355

division deaths. . .



Mr. Beauchamp



Karyl Jean.

Box 709, Knoxville.

Mrs. Williams Mr. Sharper

Edward E. Beauchamp, a safety engineer in ORNL's Industrial Safety

and Applied Health Physics Division, died August 17 at the Oak Ridge

Hospital. A resident of Oak Ridge, he

Survivors include his wife, Kathryn;

Services were held at St. Mary's

Catholic Church in Oak Ridge with

burial in Anderson Memorial

Gardens. Memorials may be made to

the American Heart Association, P.O.

son, Edward Alan; and daughter,

had worked at ORNL for 34 years.

Isadore Sharper, Y-12 Building Services Department, died August 23 in Demopolis, Ala. A native of that city, he came to Y-12 in 1951 after working with J. A. Jones and the Loan Star Cement Plant. He lived at 130 Spellman Avenue, Oak Ridge.

Survivors include his wife, Cora Greene Sharper; daughter, Bessie Davis; sons, Isadore M. and Dennis; stepsons, Watkins and Reginald Greene; stepdaughter, Minnie L. Thompson; four grandsons, four granddaughters and six greatgrandchildren; and a sister, Matilda Thurman.

Funeral services were held at the New Morning Star Baptist Church, Demopolis, with burial in the Memorial Gardens there.

Vickie Lee Williams, an inspector in ORGDP's Technical Services, died August 19 in an automobile accident near Rockwood. A native of Erie, Tenn., she had been with Union Carbide almost two years.

Survivors include her son, Brent; parents, Mr. and Mrs. Otis Williams; two brothers, Michael and Stephen; and grandfather, Oscar Redmon.

Funeral services were held at the Paint Rock Baptist Church, with burial in the church cemetery.



Swimming over. . .

The beach area at the Clark Center Recreation Park is closed for the summer, as lifeguards are no longer on duty. Picnic facilities and other park features continue as long as the weather allows. You swimmers, come back next May, hear?

Road construction. . .

Construction activity has closed McCaw Road, east of the junction of Dyke Road, near the Paducah Plant. A detour is necessitated at gate number

The road is closed until further notice.

Educational refund...

Bill Akers, left, recently received the final 50 percent refund on educational expenses as he earned his MS at the University of Tennessee. Under the Nuclear Division's Educational Assistance Program, half the expenses are paid during the instruction period, the other half on the attainment of an advanced degree. Herm Snyder, superintendent of Y-12's Employee Relations, presents Akers his check.





UNION CARBIDE CORPORATION

NUCLEAR DIVISION
P.O. BOX Y, OAK RIDGE, TENNESSEE 37830
ADDRESS CORRECTION REQUESTED

BULK RATE
U.S. Postage
PAID
Union Carbide
Corporation

